

October Test 1

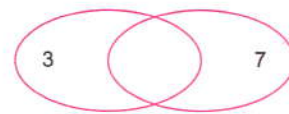
Total mark
15
(5 marks)

1. Choose the correct answer.

- a. The greatest non-positive integer is _____
 A. 1 B. -1 C. 0 D. 1.1
- b. $820 \div 24 = 34 R$ _____
 A. 0 B. 2 C. 4 D. 6
- c. Which of the following are relatively prime numbers? _____
 A. 2 and 10 B. 9 and 25 C. 4 and 6 D. 15 and 6
- d. The rational number -2.5 in the form of $\frac{a}{b}$ is _____
 A. $\frac{25}{10}$ B. $-5\frac{2}{10}$ C. $-\frac{25}{10}$ D. $-2\frac{1}{5}$
- e. $|-3\frac{1}{4}|$ _____ $-4\frac{1}{3}$
 A. < B. > C. =

2. Complete the following.

a. In the opposite Venn diagram the L.C.M is _____



(5 marks)

- b. The distance between -4 and its opposite on the number line equals _____ units.
- c. $\frac{1}{3} + \frac{2}{5} =$ _____
- d. $2\frac{1}{5} - 1\frac{1}{6} =$ _____
- e. $42 + 35 = 7 \times$ _____ $+$ _____ $\times 5$

3. a. Arrange the following numbers from the least to the greatest.

(2 marks)

$$-\frac{1}{2}, 2\frac{1}{2}, \frac{3}{4}, 0, -\frac{7}{12}$$

b. A merchant paid 2,000 L.E. to buy 16 boxes of mango. Find the price of each box and if each box contains 5 kg of mango, find the price of each kg.

(3 marks)

October Test 2

Total mark
15

(5 marks)

1. Choose the correct answer.

- a. $20 + 16 = 4$ (———— + ————)
- A. 16, 12 B. 5, 4 C. 5, 16 D. 5, 12
- b. In the algebraic expression : $5x + 4$, the constant is ————
- A. 5 B. $5x$ C. 4 D. $x + 4$
- c. The rational number lies between -2.4 and -2.5 is ————
- A. -2.51 B. 2.43 C. -2.41 D. -2.37
- d. The best subset of the number 0 is ———— numbers.
- A. counting B. natural C. integer D. rational
- e. $\frac{3}{4} + \frac{2}{4} + \frac{1}{4} + \frac{1}{4} =$ ————
- A. $\frac{7}{16}$ B. $\frac{7}{8}$ C. $1\frac{3}{4}$ D. $\frac{17}{4}$

2. Complete the following.

(5 marks)

- a. The smallest natural number is ————
- b. $|-3| =$ ————
- c. The G.C.F of 4 and 9 is ————
- d. $15,205 \div 32 =$ ————
- e. The opposite of $-2\frac{1}{3}$ is ————

3. a. Find the G.C.F and L.C.M of the two numbers 35 and 42 by using Venn diagram. (2 marks)

b. Find three rational numbers lies between : $\frac{3}{4}$ and $\frac{4}{5}$ (3 marks)

Model 1

First Choose the correct answer:

- 1 If $12 \times 34 = 408$, then $408 \div 12 = \dots\dots\dots$. (12 or 34 or 408 or 36)
- 2 3 and 5 together are prime factors of $\dots\dots\dots$.
(30 or 53 or 18 or 25)
- 3 $(2 \times 8) + (2 \times 3) = \dots\dots\dots$.
($2 \times 8 \times 3$ or $2 + (8 \times 3)$ or $2 \times (8 + 3)$ or $2 \times 8 \times 2 \times 3$)
- 4 $\frac{2}{3} < \dots\dots\dots$ ($\frac{3}{2}$ or $-\frac{3}{2}$ or $1 - \frac{2}{3}$ or $\frac{2}{3}$)
- 5 The number of terms of the algebraic expression " $2.5x + 2xy - 4$ " is $\dots\dots\dots$.
(3 or 4 or 5 or 6)
- 6 The number "m" plus 18 and the result divided by 3 = $\dots\dots\dots$.
($m \div 18 + 3$) or $\frac{m}{3 + 18}$ or $3 \div (m + 18)$ or $(m + 18) \div 3$)
- 7 The largest non-positive integer is $\dots\dots\dots$. (-1 or 1 or -100 or 0)

Second Complete the following:

- 1 If $35 \times 43 = 1,505$, then $1,505 \div \dots\dots\dots = 43$.
- 2 The prime factors of 24 are $\dots\dots\dots$.
- 3 $3 \times (7 + 8) = (\dots\dots\dots \times \dots\dots\dots) + (\dots\dots\dots \times \dots\dots\dots)$
- 4 The sum of three times a and 5 = $\dots\dots\dots$. (algebraic expression)

Third Essay questions:

1 find:

a
$$\begin{array}{r} 15 \overline{) 360} \end{array}$$

b
$$\begin{array}{r} 78 \overline{) 858} \end{array}$$

2 A fruit merchant bought **302 kg** of bananas, and then bought another **130 kg**. He wants to distribute the sum of what he bought among **12 boxes** equally. **How many** kilograms are in each box?

.....

.....

.....

3 Compare using (**<**, **=** or **>**):

a 0.9 $| - 0.9 |$

b $- 3.8$ $- 1.8$

c $- 0.9$ 0

d $-\frac{3}{8}$ $- 3.5$

Model 2

First

 Choose the correct answer:

1 If $574 = 41 \times 14$, then $580 \div 41 = 14$, and the remainder is
 (14 or 41 or 6 or 16)

2 The greatest common factor of 4 and 15 is
 (0 or 1 or 4 or 5)

3 $6 \times (7 + 5) =$
 ($(6 \times 7) + (6 \times 5)$ or $6 \times 7 + 5$ or $6 \times 7 \times 5$ or $(6 + 7) \times (6 + 5)$)

4 The number is neither a positive nor a negative number.
 (0 or 1 or -1 or 10)

5 The integer that expresses (the depth of a well of 5 meters)
 is
 (-5 or 5 or -10 or 10)

6 $-\frac{7}{4} >$
 ($\frac{7}{4}$ or $-1\frac{3}{4}$ or $\frac{8}{4}$ or $-\frac{8}{4}$)

7 The numbers 6 and are relative prime numbers.
 (4 or 15 or 35 or 20)

Second

 Complete the following:

1 is the smallest odd prime number.

2 $35 + 42 = 7 \times (\dots + \dots)$

3 All natural numbers are also and

4 $|0.03| =$

Third Essay question:

- 1 A hospital staffed by 35 doctors and 49 nurses, find the greatest number of equal groups that can be made of doctors and nurses together. How many doctors are in each group? How many nurses are in each group?

.....

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.....

$$\dots\dots = \dots\dots\dots$$

$$\dots\dots = \dots\dots\dots$$

$$\text{GCF} = \dots\dots\dots$$

- 2 Find:

a $7\frac{5}{6} + 1\frac{1}{12} =$

b $8\frac{6}{7} - 2\frac{1}{5} =$

- 3 Compare using ($<$, $=$ or $>$):

a $|1.8|$ $$ 1.8

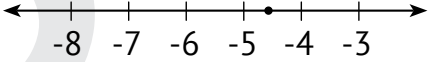
b $| - 8.2 |$ $$ $- 7.9$

c $4\frac{3}{4}$ $$ $|2\frac{2}{3}|$

d $|3.4|$ $$ $| - 3.4 |$

Model 3

First Choose the correct answer:

- 1 The rational number represented on the corresponding number line is  ($4\frac{2}{3}$ or $5\frac{2}{3}$ or $-4\frac{2}{3}$ or $-5\frac{2}{3}$)
- 2 A number that if it divided by 9, the quotient will be 15 and the remainder is 3, is (135 or 138 or 132 or 27)
- 3 All negative numbers are zero.
(greater than or less than or equal to)
- 4 The algebraic term " $\frac{1}{5}x$ " consists of factor(s). (1 or 2 or 3 or 4)
- 5 The number of terms that make up the algebraic expression " $8 + 3x + y$ " is (2 or 3 or 4 or 5)
- 6 The least common multiple of 8 and 5 is (8 or 5 or 13 or 40)
- 7 $1\frac{3}{4} + 2\frac{1}{2} =$ ($4\frac{1}{4}$ or $3\frac{1}{4}$ or $3\frac{4}{6}$ or 4)

Second Complete the following:

- 1 The smallest two-digit prime number is
- 2 $3\frac{6}{7} + \dots = 12\frac{1}{5}$
- 3 The additive inverse of -5.9 is
- 4 $|7.04| =$

Third Essay question:

1 Factorize each number into its prime factors using the factor tree:

a 45

$$45 = \dots\dots\dots$$

b 32

$$32 = \dots\dots\dots$$

c 60

$$60 = \dots\dots\dots$$

2 Find:

a $4\frac{1}{4} + 2\frac{7}{12} = \dots\dots\dots$

b $7\frac{4}{7} - 1\frac{1}{2} = \dots\dots\dots$

3 Arrange in an **ascending** order:

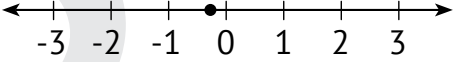
$$\frac{3}{4}, -\frac{5}{8}, -\frac{1}{2}, -\frac{3}{4}, \frac{1}{4}$$

The order:

Model 4

First

 Choose the correct answer:

- 1 The rational number represented on the corresponding number line is (- 0.2 or 0.5 or 2.5 or - 2.3)
- 
- 2 is a factor of all numbers. (0 or 1 or 2 or 3)
- 3 The prime factors of 24 are (2 x 12 or 2 x 2 x 2 x 3 or 4 x 6 or 3 x 8)
- 4 All integers are also numbers. (counting or natural or even or rational)
- 5 In the algebraic term " $- 3 \times y$ " the coefficient is (y or x or 3 or -3)
- 6 Like terms for the algebraic expression " $3 + 3a + 2a$ " are (3 , 3a or 3a, 2a or 3, 2a or 3, 3a, 2a)
- 7 The algebraic expression representing "half the difference between the number " a " and 7" is ($\frac{1}{2}a - 7$ or $\frac{1}{2}a + 7$ or $\frac{1}{2}(a - 7)$ or $\frac{1}{2}(a + 7)$)

Second

 Complete the following:

- 1 A number whose prime factors are 3, 3, and 7 is
- 2 $8 \times (\dots + \dots) = (\dots \times 9) + (\dots \times 2)$
- 3 $\frac{2}{7} + \dots = \frac{5}{14}$
- 4 - 5, - 4, - 3, - 2,,, (in the same pattern)

Third Essay question:

- 1 A box of oranges contains $2\frac{3}{5}$ kg. Another box of apples contains $4\frac{1}{8}$ kg. How many kg do the two boxes contain?
-
-

- 2 Compare using ($<$, $=$ or $>$):

a $|- \frac{8}{3}|$  $- |2\frac{2}{3}|$

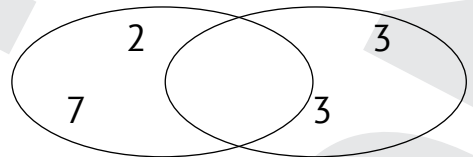
b $-3\frac{4}{5}$  $|- \frac{3}{2}|$

c $|- \frac{2}{9}|$  $- | \frac{2}{9}|$

d 2.4  $\frac{2}{4}$

- 3 Complete using the opposite figure:

- a The two numbers are and



- b Common prime factors are :

- c The **GCF** is

- d The **LCM** is

- e Are the two numbers relatively prime?

(Yes or No)

Model 5

First

 Choose the correct answer:

- 1 An integer between 2 and -2 is (-1 -3 3 -4)
- 2 In the algebraic term " $-5xy$ ", the coefficient is
(y x 5 -5)
- 3 If Basim is " x " years old now, then how old will he be after 5 years?
..... (x - 5 x + 5 5 ÷ x 5 x)
- 4 If the price of one book is 15 pounds, how much is the price of " b " number of books? (15 b 15 - b b - 15 b + 15)
- 5 The least common multiple of any two prime numbers is
(0 1 their sum their product)
- 6 0, 6, 8, 2 are numbers. (even odd prime etc.)
- 7 $-9 >$ (- 15 8 - 8 10)

Second

 Complete the following:

- 1 The number that if divided by 57, the quotient will be 34, and the remainder is 12, is
- 2 The smallest three-digit prime number is
- 3 X (4 + 6) = (9 X) + (9 X)

Third Essay questions:

1 Carina has 24 apples and 36 bananas. She wants to put all the fruit into plastic containers, each with the same number of pieces of fruit. **What is the greatest number of pieces of fruit can she put in each plastic container?**

.....

..... =

..... =

GCF =

2 Find:

a $9\frac{2}{3} + 5\frac{1}{9} =$

b $80\frac{2}{5} - 25\frac{3}{4} =$

3 Shaimaa bought a pen for $9\frac{1}{2}$ pounds, a ruler for $5\frac{1}{4}$ pounds, and a notebook for 4 pounds. How much did Shaimaa pay?

.....

4 Arrange in an ascending order:

$2, -5.5, 7, 3.7, -1, 2\frac{1}{3}, 3\frac{4}{5}$

The order:,,,,

Model 6

First Choose the correct answer:

- 1 0 is a / an
(counting number or natural number or negative integer or odd number)
- 2 In the algebraic expression " $5a + 3b + 2 + 4$ " the coefficients are
(2, 4 or 5, 3 or a, b or 5, 3, 2, 4)
- 3 The number comes just before is -1. (-2 or 2 or 0 or 1)
- 4 The absolute value of "zero" is (10 or 0 or -1 or 1)
- 5 A square of side length " s " cm has a perimeter of cm.
($s + 4$ or $s \times 4$ or $\frac{s}{4}$ or $4s$)
- 6 Twice the sum of 7 and " x " is
($2x + 7$ or $2(x + 7)$ or $27 + x$ or $2(2x + 7)$)
- 7 3 and 2 together are prime factors of the number
(30 or 53 or 27 or 25)

Second Complete the following:

- 1 If $1,140 \div 13 = 87$ and the remainder is 9, then $13 \times 87 =$
- 2 The least common multiple of the two relatively prime number is
- 3 $63 + 81 =$ $\times (7+9)$
- 4 The number - 2.5 in the form $\frac{a}{b}$ is (in its simplest form)

Third Essay question:

1 Ahmed took $65 \frac{1}{5}$ LE from his father and $34 \frac{1}{5}$ LE from his mother. Find out how much he took from both.

.....

.....

2 Arrange in an ascending order:

$2, -17, |-3|, -9, |12|$

The order:

.....,,,,

3 Ali needs to ship 14 rock CDs and 12 classical CDs. He wants to arrange the CDs in packs so each pack should have the same number of each kind. What is the greatest number of packs?

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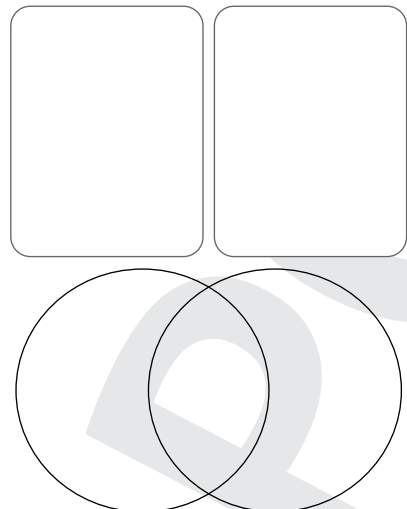
..... =

..... =

GCF =

4 Using the Venn diagram: find the GCF and LCM for 12 and 9.

- a $12 =$
- b $9 =$
- c The **GCF** =
- d The **LCM** =



Model 7

First

 Choose the correct answer:

- 1 If the prime factors of a number are $2 \times 3 \times 3$, then the number is
(18 or 9 or 11 or 233)
- 2 The greatest common factor of 6 and 25 is
(0 or 1 or 4 or 5)
- 3 5 is not a / an
(counting number or natural number or integer or even number)
- 4 If we subtract 5 from the number "x", the result is
($x + 5$ or $x - 5$ or $5 - x$ or $5x$)
- 5 Which of the following operations expresses the mathematical expression "double a number plus 4"?
(+, - or \times , - or \times , + or \times , \div)
- 6 Samah is now 25 years old. How old was she "h" years ago?
($25 - h$ or $h - 25$ or $25 + h$ or $25h$)
- 7 7, 5, 3, and 2 are numbers.
(even or odd or prime or otherwise)

Second

 Complete the following:

- 1 $\times (5 + 8) = (7 \times \dots) + (7 \times \dots)$
- 2 $3 \frac{4}{7} + \dots = 7 \frac{2}{3}$
- 3 Integers between -3 and 2 are
- 4 The smallest positive integer is

Third Essay question:

1 Hussam is training for n hours daily for 6 days of the week, and on Friday he is training for 3 hours. How many hours does Hossam spend training in one week?

2 I want to plant 45 sunflower plants and 81 corn plants in my garden. If I put the same number of plants in each row, what is the greatest number of rows I can make?

.....

..... =

..... =

GCF =

3 Find:

a $3\frac{3}{10} + 8\frac{1}{4} =$

b $15\frac{2}{3} - 8\frac{5}{6} =$

4 Arrange in an ascending order:

7.3 , - 2.7 , |6.7| , - 4.8 , |-1.5|

The order:

..... , , , ,

Model 8

First

 Choose the correct answer:

- 1 The greatest common factor of a number whose prime factors are 2 and 5 and a number whose factors are 3 and 7 is
(0 or 10 or 1 or 210)
- 2 -3 is located to the right of on the number line.
(-4 or 4 or -2 or 2)
- 3 The number just after -9 is (-10 or -8 or 10 or 8)
- 4 The additive inverse of a number $\frac{3}{5}$ $-\frac{5}{3}$ ($>$ or $=$ or $<$)
- 5 The number of terms of the expression " $5x + 3y + 2$ " is
(2 or 3 or 5 or 6)
- 6 If " b " is an integer, then the integer immediately next to it is
($b + 1$ or $b - 1$ or $2b$ or $\frac{b}{2}$)
- 7 Kareem is " x " years old now, how old was he 3 years ago?
($x - 3$ or $x + 3$ or $3 \div x$ or $3x$)

Second

 Complete the following:

- 1 Two numbers are relatively prime numbers if their greatest common factor is
- 2 $8 \times (9 + 2) = (\text{.....} \times \text{.....}) + (\text{.....} \times \text{.....})$
- 3 $3\frac{1}{4} + \text{.....} = 5\frac{3}{16}$
- 4 $10\frac{3}{10} - \text{.....} = 4\frac{1}{2}$

Third Essay question:

1 The number of rooms in one of the hotels reached 372 room. These rooms are divided evenly over 12 floors. How many rooms are there in each floor?

.....

2 Abdulrahman needs to ship 16 comedy DVDs and 24 animated DVDs. He will pack them in backs with the same number of each kind of DVDs . What is the greatest number of backs DVDs Abdulrahman can buy?

.....

.....	=
.....	=
GCF	=

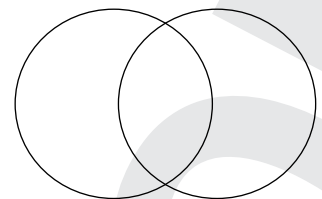
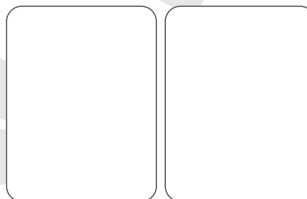
3 Using the Venn diagram : find the GCF and LCM For 14 and 21.

a 14 =

b 21 =

c The GCF =

d The LCM =



4 Wafaa has 300 pounds. She bought 9 pens of the same type. The price of one pen is "p" pounds. What is the amount left with Wafaa after buying the pens?

.....

Model 9

First Choose the correct answer:

- 1 A/An is a number with only two factors.
(even number or prime number or odd number or composite number)
- 2 The additive inverse of is itself. (1 or 2 or 3 or 0)
- 3 The common factor of the two prime numbers is
(their sum or their product or 1 or 0)
- 4 The opposite of $5 >$ (-4 or 4 or -6 or 6)
- 5 All positive numbers zero. (greater than or less than or equal to)
- 6 The algebraic term is "5ab" from factors. (1 or 2 or 3 or 4)
- 7 The algebraic expression representing the difference between 3 times the number "y" and 2 is
($3 - 2y$ or $2(y - 3)$ or $3y - 2$ or $2y - 3$)

Second Complete the following:

- 1 If $1,541 = 67 \times 23$, then $1,550 \div 67 = 23$, and the remainder
- 2 $4\frac{1}{4} - \dots = 2\frac{7}{12}$
- 3 Salma dives 10 meters below the sea level (.....) (an integer)
- 4 Divide "h" by 6 (mathematical expression)

Third Essay questions:

- 1 A rectangular garden with dimensions of 124 meters by 65 meters, divided into rectangular planting basins, each of which is 62 square meters. How many basins are in the garden?
-
-

- 2 Compare using ($<$, $=$ or $>$):

a $|-2.5|$ \bigcirc $|-3.6|$

b 5.07 \bigcirc $|-5.071|$

c $|-4\frac{2}{5}|$ \bigcirc $|-1\frac{1}{2}|$

d $-|5\frac{2}{3}|$ \bigcirc $|-1\frac{1}{2}|$

- 3 A road of 15 km in length, paved in three stages, $6\frac{2}{5}$ km in the first stage. $4\frac{1}{2}$ km in the second stage, how long is the distance paved in the third stage?
-
-

- 4 Arrange in an ascending order:

$$0.75, -\frac{1}{8}, -\frac{1}{2}, -\frac{1}{4}, |0.25|$$

The order:,,,,

Model 10

First Choose the correct answer:

- 1 The greatest two-digit prime number is (11 or 19 or 97 or 89)
- 2 $-| -4 | =$ (4 or -4 or 0.4 or $\frac{1}{4}$)
- 3 A number whose prime factors are 2, 3, 7 is
(237 or 42 or 12 or 35)
- 4 The additive inverse of -8 is (18 or 8 or 0.8 or $\frac{1}{8}$)
- 5 The largest non-positive integer is (-1 or 1 or -100 or 0)
- 6 In the algebraic expression " $3m + 2$ ", the constant is
(2 or 3 or m or $3m$)
- 7 Two numbers whose sum is 35, and one of them is " w ", then the other number is ($w + 35$ or $w - 35$ or $35 - w$ or $35w$)

Second Complete the following:

- 1 If $377 \div 29 = 13$, then $13 \times 29 =$
- 2 The temperature is 12°C below zero (.....). (An integer)
- 3 Galal saved " n " pounds per day for 9 days, then he got 20 pounds from his father, then the algebraic expression is
- 4 Twice the sum of " g " and 6 =

Third Essay question:

- 1 The price of 35 cans is 525 LE. Find the price of 27 cans.

.....

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- 2 Complete using the following Venn diagram:

a The two numbers are and

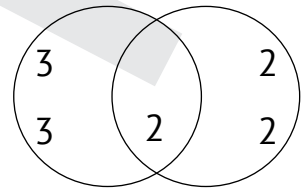
b The prime common factors are:

c The **GCF** =

d The **LCM** =

e Are the two numbers relatively prime?

(Yes or No)



- 3 Find:

a $3\frac{1}{4} + 5\frac{3}{16} =$

b $10\frac{3}{8} - 3\frac{5}{12} =$

- 4 If Wafaa uses $1\frac{3}{4}$ cup of butter to make a cake and $\frac{1}{5}$ cup will remain. How much butter does she have before cooking?

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Model 1

First

- 1 34 2 30
 3 $2 \times (8 + 3)$ 4 $\frac{3}{2}$ 5 3
 6 $(m + 18) \div 3$
 7 0

Second

- 1 35 2 $2 \times 2 \times 2 \times 3$
 3 $(3 \times 7) + (3 \times 8)$ 4 $3a + 5$

Third

- 1 a 24 b 11
 2 Total mass of banana = $302 + 130 = 432$ kg
 Mass of banana in each box = $432 \div 12 = 36$ kg
 3 a = b < c <
 d >

Model 2

First

- 1 6 2 1
 3 $(6 \times 7) + (6 \times 5)$ 4 0
 5 - 5 6 $-\frac{8}{4}$ 7 35

Second

- 1 3 2 5 + 6
 3 Integers, Rational numbers 4 0.03

Third

- 1 Number of groups (GCF) = 7 groups
 Number of doctors in each group = $35 \div 7 = 5$ doctors
 Number of nurses are in each group = $42 \div 7 = 6$ nurses
 2 a $7\frac{5}{6} + 1\frac{1}{12} = 7\frac{10}{12} + 1\frac{1}{12} = 8\frac{11}{12}$
 b $8\frac{6}{7} - 2\frac{1}{5} = 8\frac{30}{35} - 2\frac{7}{35} = 6\frac{23}{35}$
 3 a = b > c >
 d =

Model 3

First

- 1 $-4\frac{2}{3}$ 2 138
 3 less than 4 2 5 2
 6 40 7 $4\frac{1}{4}$

Second

- 1 11 2 $8\frac{12}{35}$
 3 5.9 4 7.04

Third

- 1 a $45 = 3 \times 3 \times 5$
 b $32 = 2 \times 2 \times 2 \times 2 \times 2$
 c $60 = 2 \times 2 \times 3 \times 5$
 2 a $4\frac{1}{4} + 2\frac{7}{12} = 4\frac{3}{12} + 2\frac{7}{12} = 6\frac{10}{12} = 6\frac{5}{6}$
 b $7\frac{4}{7} - 1\frac{1}{2} = 7\frac{8}{14} - 1\frac{7}{14} = 6\frac{1}{14}$
 3 $-\frac{3}{4}, -\frac{5}{8}, -\frac{1}{2}, \frac{1}{4}, \frac{3}{4}$

Model 4

First

- 1 -0.2 2 1
 3 $2 \times 2 \times 2 \times 3$ 4 rational 5 - 3
 6 $3a, 2a$ 7 $\frac{1}{2}(a - 7)$

Second

- 1 63 2 $8 \times (9 + 2) = (8 \times 9) + (8 \times 2)$
 3 $\frac{1}{14}$ 4 - 1, 0, 1, 2

Third

- 1 The two boxes contain = $2\frac{3}{5} + 4\frac{1}{8}$
 = $2\frac{24}{40} + 4\frac{5}{40} = 6\frac{29}{40}$ kg
 2 a > b < c >
 d >
 3 a 14, 9 b none c 1
 d 126 e yes

Model 5

First

- 1 -1 2 -5 3 $x + 5$
 4 15 b 5 their product 6 even
 7 -15

Second

- 1 The number = $57 \times 34 + 12 = 1,950$
 2 101 3 $9 \times (4 + 6) = (9 \times 4) + (9 \times 6)$

Third

- 1 The number of plastic container (GCF) = 12
 The number of apples in each container
 = $24 \div 12 = 2$ apples
 The number of bananas in each container
 = $36 \div 12 = 3$ bananas
 2 a $9 \frac{2}{3} + 5 \frac{1}{9} = 9 \frac{6}{9} + 5 \frac{1}{9} = 14 \frac{7}{9}$
 b $80 \frac{2}{5} - 25 \frac{3}{4} = 80 \frac{8}{20} - 25 \frac{15}{20} = 54 \frac{13}{20}$
 3 Shaima paid = $9 \frac{1}{2} + 5 \frac{1}{4} + 4 = 9 \frac{2}{4} + 5 \frac{1}{4} + 4 = 18 \frac{3}{4}$ pounds.
 4 -5.5, -1, 2, 2 $\frac{1}{3}$, 3.7, 3 $\frac{4}{5}$, 7

Model 6

First

- 1 natural number 2 5, 3
 3 -2 4 0 5 4 s
 6 $2(x + 7)$ 7 30

Second

- 1 1,131 2 their product
 3 9 4 $-\frac{5}{2}$

Third

- 1 Ahmed took from both = $65 \frac{1}{5} + 34 \frac{1}{5}$
 = $65 \frac{1}{5} + 34 \frac{1}{5} = 99 \frac{2}{5}$ pounds
 2 -17, -9, 2, | -3 |, | 12 |
 3 The greatest number packs of CDs (GCF) = 2 CDs
 4 a $12 = 2 \times 2 \times 3$ b $9 = 3 \times 3$
 c GCF = 3
 d LCM = $2 \times 2 \times 3 \times 3 = 36$

Model 7

First

- 1 18 2 1
 3 even number 4 $x - 5$ 5 $x, +$
 6 $25 - h$ 7 prime

Second

- 1 $7 \times (5 + 8) = (7 \times 5) + (7 \times 8)$ 2 $4 \frac{2}{21}$
 3 -2, -1, 0, 1 4 1

Third

- 1 The number of hours = $6n + 3$
 2 The number rows (GCF) = 9 rows
 3 a $3 \frac{3}{10} + 8 \frac{1}{4} = 3 \frac{6}{20} + 8 \frac{5}{20} = 11 \frac{11}{20}$
 b $15 \frac{2}{3} - 8 \frac{5}{6} = 15 \frac{4}{6} - 8 \frac{5}{6} = 6 \frac{5}{6}$
 4 -4.8, -2.7, | -1.5 |, | 6.7 |, 7.3

Model 8

First

- 1 1 2 -4
 3 -8 4 > 5 3
 6 $b + 1$ 7 $x - 3$

Second

- 1 1 2 $8 \times (9 + 2) = (8 \times 9) + (8 \times 2)$
 3 $1 \frac{15}{16}$ 4 $5 \frac{4}{5}$

Third

- 1 The number of rooms in each floor
 = $372 \div 12 = 31$ rooms.
 2 The greatest number of backs DVDs (GCF) = 8 backs
 3 a $14 = 2 \times 7$
 b $21 = 7 \times 3$
 c GCF = 7
 d LCM = $2 \times 7 \times 3 = 42$
 4 $300 - 9p$

Model 9

First

- 1 prime number 2 0
 3 1 4 - 6
 5 greater than 6 3 7 $3y - 2$

Second

- 1 9 2 $1\frac{2}{3}$
 3 - 10 4 $h \div 6$

Third

- 1 Area of the garden = $124 \times 65 = 8,060$ square meters
 The number of basins = $8,060 \div 62 = 130$ basins.
 2 a < b <
 c > d <
 3 First and second stages = $6\frac{2}{5} + 4\frac{1}{2} = 10\frac{9}{10}$ km.
 The third stage = $15 - 10\frac{9}{10} = 4\frac{1}{10}$ km.
 4 $-\frac{1}{2}$, $-\frac{1}{4}$, $-\frac{1}{8}$, | 0.25 |, 0.75

Model 10

First

- 1 97 2 - 4
 3 42 4 8 5 0
 6 2 7 $35 - w$

Second

- 1 377 2 - 12
 3 $9n + 20$ 4 $2 \times (g + 6)$

Third

- 1 The price of one can = $525 \div 35 = 15$ LE
 The price of 27 cans = $27 \times 15 = 405$ LE.
 2 a 18,8 b 2 c 2
 d 72 e no
 3 a $3\frac{1}{4} + 5\frac{3}{16} = 3\frac{4}{16} + 5\frac{3}{16} = 8\frac{7}{16}$
 b $10\frac{3}{8} - 3\frac{5}{12} = 10\frac{9}{24} - 3\frac{10}{24} = 6\frac{23}{24}$
 4 The butter she has before cooking
 = $1\frac{3}{4} + \frac{1}{5} = 1\frac{15}{20} + \frac{4}{20} = 1\frac{19}{20}$ cup.

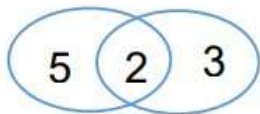
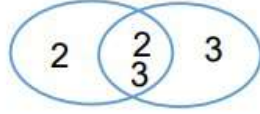
Name: _____



Grade 6 Unit (1)

Time: 45 minutes

Q1: Choose the correct answer:

- 1) The common factor of all numbers is
- a. 0 b. 1 c. 2 d. 3
- 2) The G.C.F of any two prime numbers is
- a. 0 b. 1 c. 2 d. 3
- The common multiple of all factors is
- a. 0 b. 1 c. 2 d. 3
- 4) The following expression represents the greatest number of bags can be made from apples and bananas respectively: $(12 \times 6) + (12 \times 4)$, then the number of all bags is
- a. 12 b. 4 c. 6 d. 120
- 5) If $29 \div 3 = 9 \text{ R}2$, then the divisor is
- a. 29 b. 3 c. 9 d. 2
- 6) Which is the correct relation represents the following statement: (distribute 16 crayons equally among 4 students)
- a. 16×4 b. $16 \div 4$ c. $16 + 4$ d. $16 - 4$
- 7) The following Venn diagram represents the prime factorization of two numbers which are
- a. 3 and 5 b. 2 and 3
- 
- c. 2 and 5 d. 6 and 10
- 8) The following expression represents the greatest number of bags can be made from mangos and bananas respectively, then the number of all bags is
- a. 4 b. 9
- 
- c. 6 d. 36

Q2: Complete the following

1) $1 \frac{3}{5} + \frac{1}{3} = \dots\dots\dots$

2) $\frac{5}{8} + \frac{\dots\dots\dots}{\dots\dots\dots} = 1$

- 3) The prime number has only factor(s).
- 4) The LCM of two relatively prime numbers is
- 5) If $13 \times 35 = 455$, then $455 \div 13 =$
- 6) A number whose prime factors are 3, 3 and 2 is
- 7) The only even prime number is

Q3: Answer the following:

- 1) Karim 48 pencils and 18 crayons. What is the numerical expression of the greatest number of sets that can be made so that all sets include the same number of items?

- 2) Ali bought a bottle of juice contains $1 \frac{3}{4}$ liters of orange juice. He drank $\frac{2}{5}$ liter of juice. **How much of juice is left in the bottle?**

- 3) Ahmed has 1,378 oranges and need to pack them up equally in 25 boxes. **How many oranges in each box?**

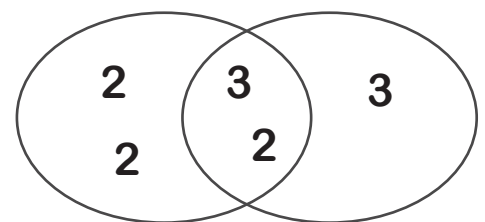
- 4) a) The two numbers represented in venn digram are: and

b) The GCF for the two numbers is

c) The LCM for the two numbers is

d) Are the two numbers relatively prime numbers?

(Yes or No)



Good luck

Name: _____



Grade 6 Unit (1)

Time: 45 minutes

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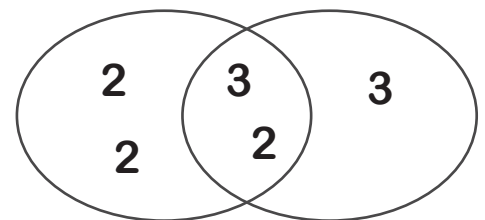
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(Yes or No)



Good luck

Q1: Choose the correct answer:

- 1) The number $-2\frac{1}{4}$ in the form $\frac{a}{b}$ is _____
A. $-\frac{4}{9}$ B. $-\frac{9}{4}$ C. $-\frac{7}{4}$ D. $-\frac{21}{4}$
- 2) $|-11| >$ _____
A. 10 B. 11 C. 13 D. 101
- 3) The distance between -4 and its opposite on the number line is _____ unit[s]
A. zero B. 4 C. 8 D. 16
- 4) Wael deposit of 1,000 L.E. in a bank represents as _____
A. 1,000 B. $-1,000$ C. 100 D. -100
- 5) Which of the following is nearest to zero? _____
A. -4 B. 4 C. -3 D. 2
- 6) The smallest natural number is _____
A. -2 B. -1 C. 0 D. 1
- 7) The opposite of the number -8 is _____
A. -8 B. 8 C. 0 D. -7
- 8) The greatest negative integer is _____
A. -1 B. -2 C. -3 D. -4

Q2: Complete the following

- 1) The smallest non-negative integer is _____
- 2) The number of integers between -2 and 3 is _____
- 3) The opposite of zero is _____
- 4) The integer numbers consists of negative numbers and numbers.
- 5) The number of integers between -2 and 2 is

- 6) The integer which just before -10 is
- 7) The integer which just next to - 4 is
- 8) The number is neither positive nor negative.
- 9) Set of integers of set of counting numbers.

Q3: Answer the following:

1) Find two rational numbers lying between :

a. $\frac{2}{3}$ and $\frac{5}{6}$

b. $\frac{2}{3}$ and $\frac{3}{4}$

c. -3.7 and -3.8

2) Arrange the following from greatest to least.

$$3, -\frac{7}{2}, \frac{5}{2}, 3\frac{1}{4}, 0, -11$$

3) Find the value of x

a. $|x| = 5$

b. $|x| = 12$

c. $|x| = 0$

d. $|-4| = x$

e. $|3| = x$

f. $|-101| = x$

4) Write each statement, filling in each blank with the inequality symbol, < or > , that correctly completes the statement.

a. -7 _____ -3

b. 8 _____ 0

c. 3 _____ 4

d. 2 _____ -9

e. -6 _____ 0

f. 2 _____ -2



Good luck